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Big data analysis solutions using MapReduce framework (Conference Paper)

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Abstract

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Recently, data that generated from variety of sources with massive volumes, high rates, and different data structure, data with these characteristics is called Big Data. Big Data processing and analyzing is a challenge for the current systems because they were designed without Big Data requirements in mind and most of them were built on centralized architecture, which is not suitable for Big Data processing because it results on high processing cost and low processing performance and quality. MapReduce framework was built as a parallel distributed programming model to process such large-scale datasets effectively and efficiently. This paper presents six successful Big Data software analysis solutions implemented on MapReduce framework, describing their datasets structures and how they were implemented, so that it can guide and help other researchers in their own Big Data solutions. © 2014 IEEE.

Author keywords

Big Data data analysis data mining MapReduce

Indexed keywords

Engineering controlled terms: Data handling Data mining Data reduction Information analysis

Analysis solution
Centralized architecture
Data requirements
Distributed programming model
Large-scale datasets
Map-reduce
Mapreduce frameworks
Processing performance

Engineering main heading: Big data

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